Notebook, Volume 9

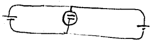
This volume covers the period August-December 1875. The notes and drawings are by Edison and Charles Batchelor, and the names of James Adams and Edward H. Johnson occasionally appear as witnesses. Most of the material relates to acoustic telegraphy. There are also notes and drawings of etheric force experiments and a drawing of a pen for an autographic telegraph. The volume consists of 23 numbered, unbound leaves, many of which appear to have been removed from a scrapbook. Some of the pages in Scrapbook Fragment, Cat. 30,100 (Miscellaneous Shop and Laboratory Notebooks) were probably also removed from the same scrapbook.

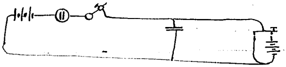
Missing pages, found in facsimile in the Telephone Interferences: 6-10, 17.

Missing pages: 1-2, 4, 14-16.

THE REDUCTION RATIO FOR THIS DOCUMENT IS 16:1

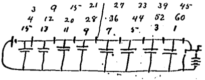
Feby 17.1874 — Cable





150
96

1 cell


3 9 15 21 27 33 39 45
4 12 20 28 36 44 52 60
15 13 11 9 7 5 3 1

4 cells
3

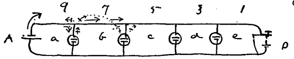
12 .4.

Contact Du General

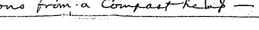
Specimen of the writing 4 12 64. 128

Forthwith Eureka Photographic
Yours truly Yours Truly

Longstreet Rebel General this is a specimen of the writing of
Transmundane Glory
Effulgent rays of Idiocy
Transcendent Terrors


9
7
5
3
1
A
a
b
c
d
e
D

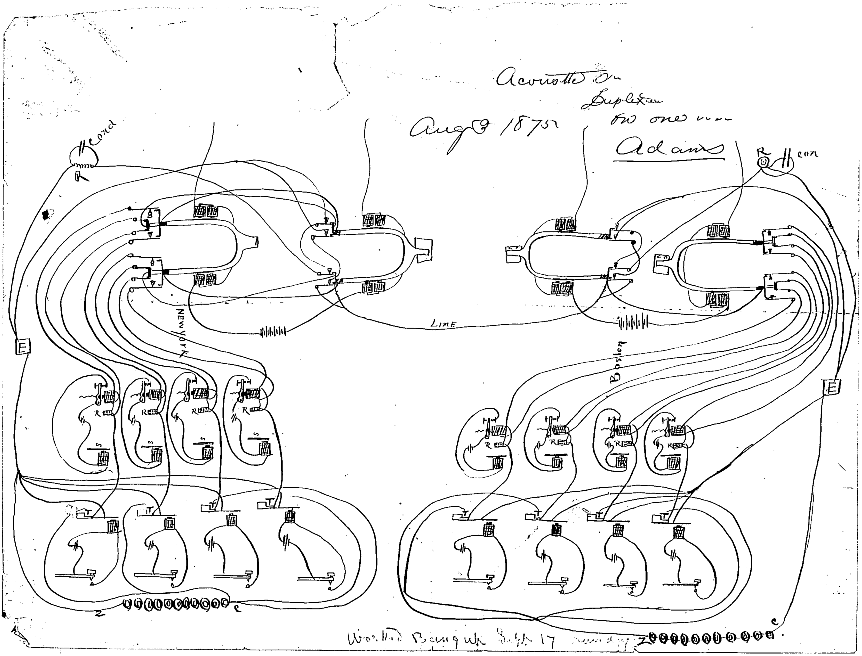
Scintillations of a
Dung Heap



If he were quartered and buried in different parts of The Earth Thieves will grow spontaneously from his grave like Mushrooms from a Compost heap —

Unbound Notebooks, Volumes 8-18

Vol. 9 (pp. 1, 15, 16)


cond
R
con
R
E
E
New York
Boston
Line
R
S
Res
T
2
C
Z
C

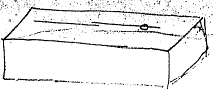
Acoustic on Duplex on one wire

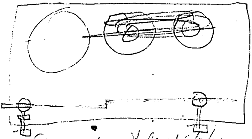
Aug 8 1875

Adams

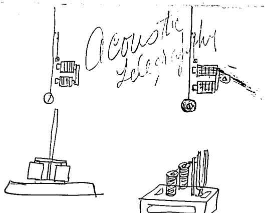
Worked Banquhr Sept 17 Sunday

T A Edison



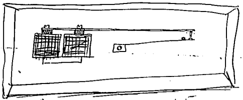


Acoustic Telegraphy
Nov 15 1875
Batchelor


Acoustic Telegraphy

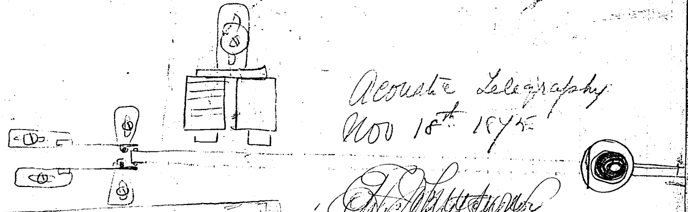
T A Edison

Case 118 Exhibit D.



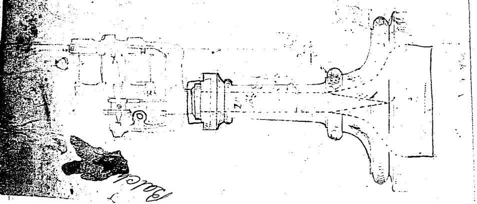
Nov 12 1875
Batchelor

James Adams



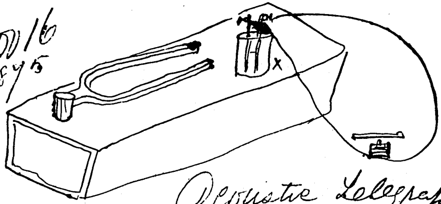
Acoustic Telegraphy
Nov 18th 1875

Chas Batchelor
James Adams



EDISON'S EXHIBIT. 6–9.

Nov 16
1875

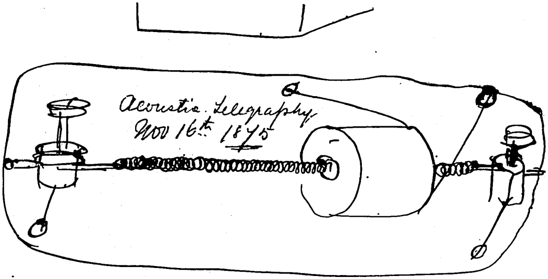


Acoustic Telegraphy

X is a quickly polarizing battery which depolarizes powerfully with the least jar, as the tuning fork responds only to vibrations in unison with its swinging time. it will be set in motion & this in its turn will set the Resonant box vibrating depolarizing or knocking loose the hydrogen bubbles on the plates of the batty X increasing the strength & closing the sounder. the X should having low resistance.

T A Edison
Jas Adams
John Kruesi

EDISON'S EXHIBIT. 7–9.



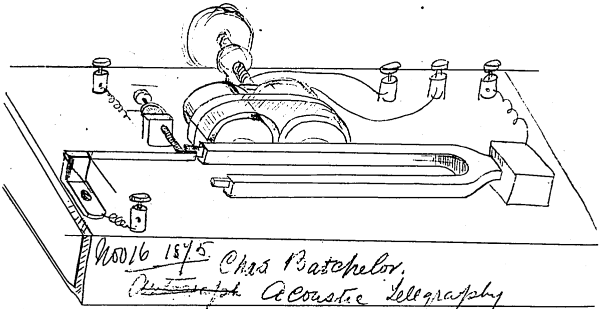
Acoustic Telegraphy
Nov 16th 1875

Iron wire delicate — Chas Batchelor
T A Edison
Jas Adams
John Kruesi

Exhibit 7-9 S.L.G.

9/9 Am ltr 8 & 9 fld
Rel
Gen Interference

EDISON'S EXHIBIT. 8-9.



Nov 16 1875 Chas Batchelor.

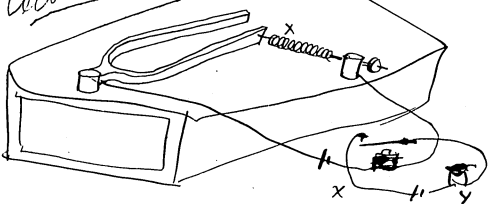
~~[illegible]~~ Acoustic Telegraphy

James Adams

Exhibit 8-9 S L G

EDISON'S EXHIBIT. 9-9.

Nov 16 1875
Acoustic Telegraphy



X germansilver ~~which~~ is circuit with gravity battery & 1/2 ohm Sounder when fork is not vibrating each turn of the spring touches its neighbor and the Sounder X is closed & Y is open— when fork vibrates it sets the spiral in motion & separates each coil putting a large resistance, ~~Its opens~~ X & closes Y

Chas Batchelor

T A Edison

Jas Adams

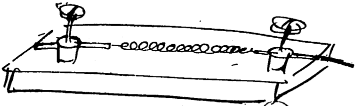
Edison Exhibit 9-9 S.E.G.

John Kruesi

EDISON'S EXHIBIT. 9–9.

Acoustic Telegraphy

Nov 16 1875



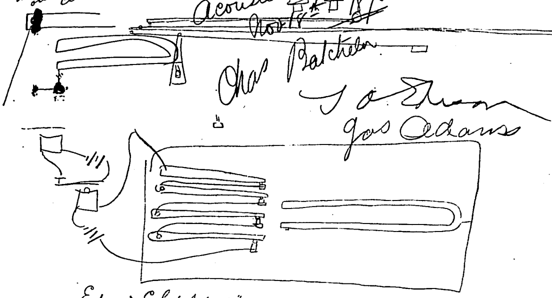
T A Edison

Chas Batchelor

Jas Adams

John Kruesi

EDISON'S EXHIBIT. 10-9.



mercury spread out to close circuit between fork + wire made connected with cup globule Hg rests at Bottom

Acoustic Telegraph

Nov 18th 1875

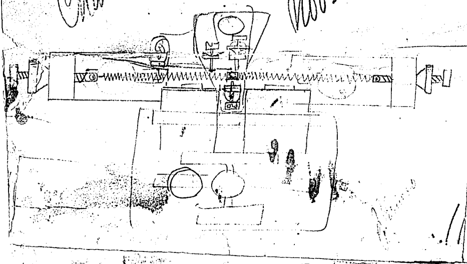
Chas Batchelor

T A Edison

Jas Adams

Edison's Exhibit 10-9"
S.L.G.

Chas Batchelor Nov 21st 1875

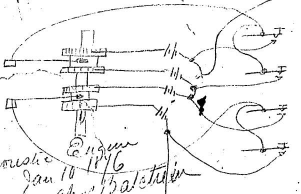


Fund[illegible] 176	22	teeth	even	44
" 220	27	"	4 out	54
264	33	"	even	66
330	41	"	2 outs	82

8 Revolutions per second

480 revolutions per minute

1/2 long & double the teeth



Acoustic Engine Jan 10 1876

Chas Batchelor

11

Exhibit A

Etheric Force

Page 1

Fig 1

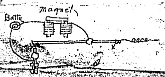

Batty
magnet
x

Fig 9

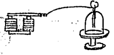


Fig 10

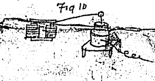


Fig 2

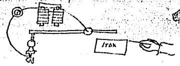


Fig 3.

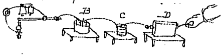
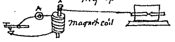


Fig 4


A
x
magnet coil

X copper core

Fig 5

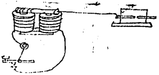


Fig 6

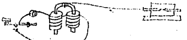
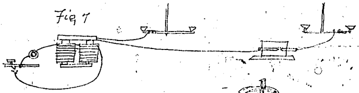


Fig 7



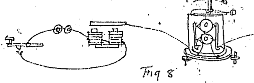
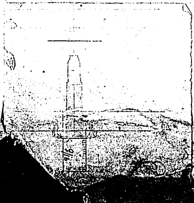
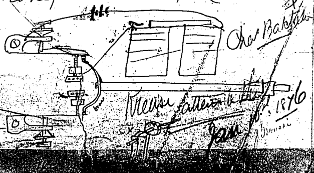


Fig 8

11



Batch have 3 reeds altered for tonight this way (Transmitting)

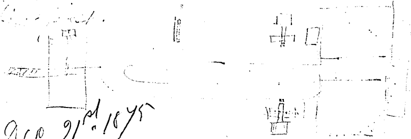


Chas Batchelor

Please attention to this

Jan 1876

Kruesi Put a [illegible]
on this like the [illegible]
[illegible].



Dec 21st 1875

T A Edison

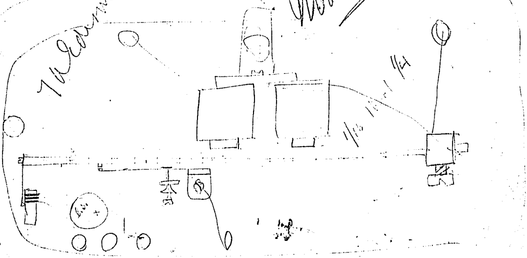
Batchelor

Kruesi

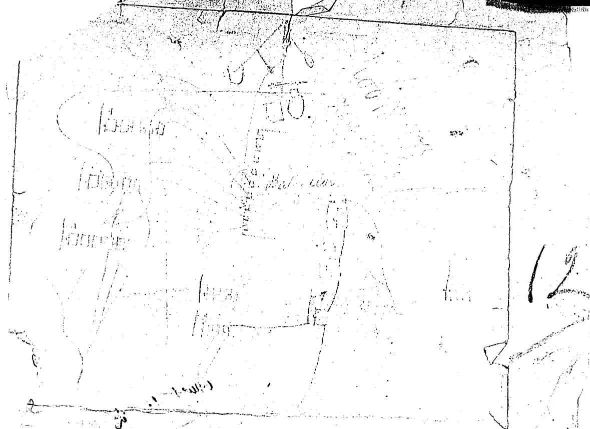
[illegible] 1/2

Nov 21st 1875

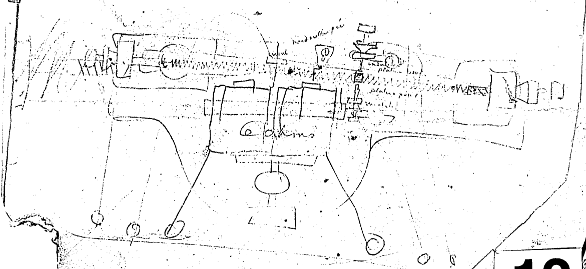
T A Edison



2 street
dull

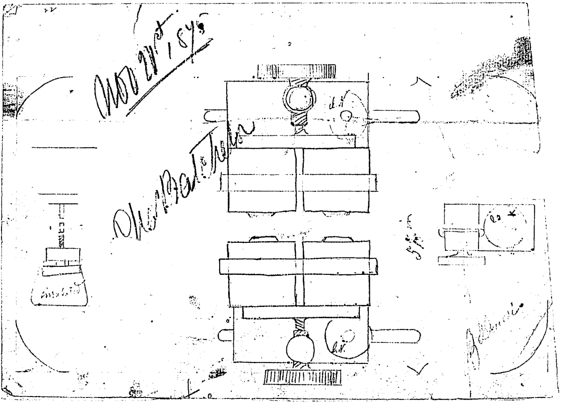


wire 1/16 hard drawn [illegible]
light [illegible] ways to [illegible]


6 ohms
platen [illegible]
platen pair

4 of 1[illegible]

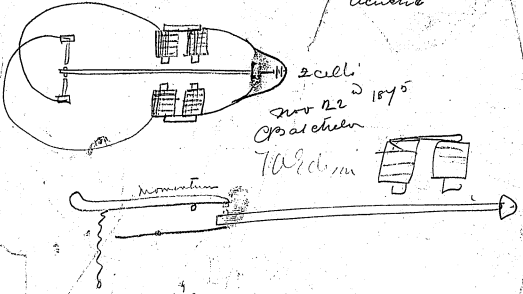
12


d.v.
l.v.
insulated

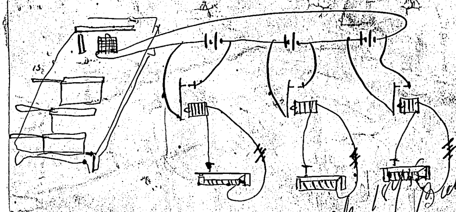
Nov 21st, 1875

Oliver Batchelor

Acustic


2 cells
momentum

Nov 22nd 1875
Chas Batchelor
T A Edison



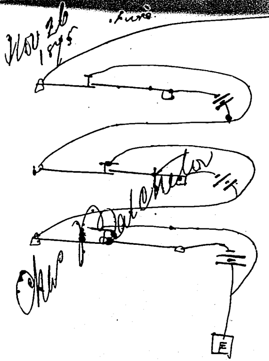
Try this, Nov 22 1875 Chas Batchelor

Exhibit D
Case 116

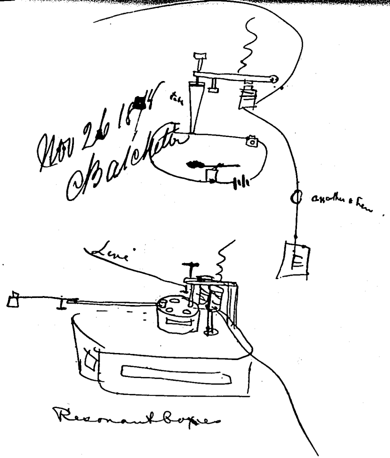
Unbound Notebooks, Volumes 8-18

Vol. 9 (pp. 1, 15, 16)

EDISON'S EXHIBIT. 17-9.

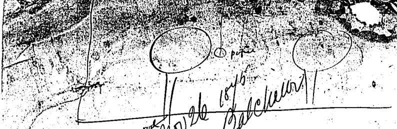

Nov 26 1875
Fuse
E

Chas Batchelor


tick
another & Few
E
Line
Resonant Boxes

Nov 26 1874
Batchelor

Instead of breaking the circuit like Grey throw in and out bobbins of the same size and preserve the continuity =

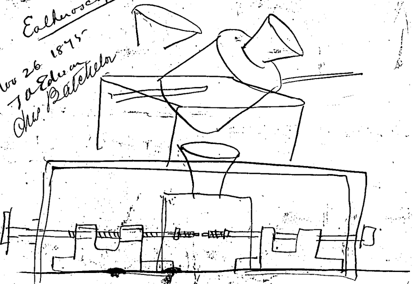

pipe
to vibrating iron rod

Nov 26 1875
Chas Batchelor

Connect & disconnect to see if attracts ball

Etheroscope

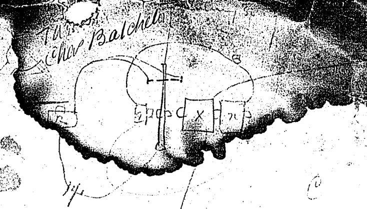
Nov 26 1875
T A Edison
Chas Batchelor



Nov 26 1875
Chas Batchelor

See p 90 Cog

18



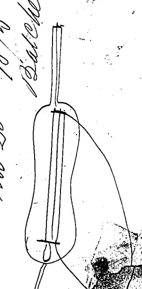
[illegible]

18

Nov 23rd 1875

Idea just occurred to me that the paraffine paper used in Condenser should be previously turned into tri-nitro cellulose (TC) Explosive paper by nitric & Sulphuric acid when it becomes the most Easily electrified substance and would probably increase the Electrostatic Capacity of the Condenser Enormously

C Batchelor



Nov 23 1875
Batchelor

New force

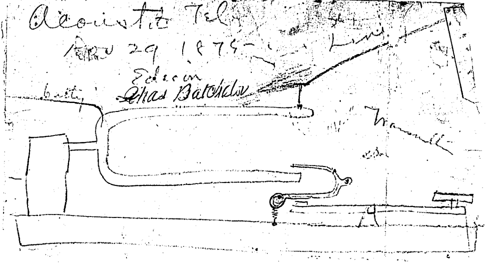
Pass 5 cells of battery through the metallic string then strongly [illegible] it & test for a spark on [illegible] screw driver

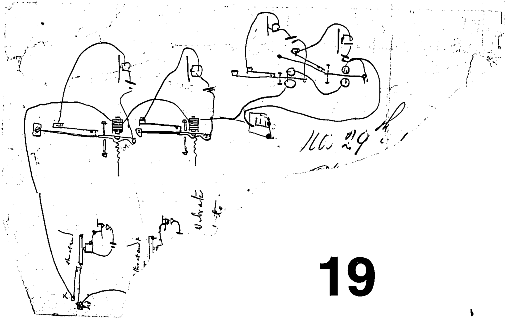
Acoustic Tel

Apr 29 1875

Edison

Chas Batchelor


batty
Line
Transmitter



Apr 29th

(acoustic telegraph)

1	$1\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{1}{4}$
2	$2\frac{1}{2}$	$2\frac{1}{2}$	$4\frac{1}{2}$
4	3	5	9
8	6	10	18
16	12		

10	10
7	7
4	5
1	3

Table of Reed Lengths

1	$1\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{1}{4}$
2	$2\frac{1}{2}$	$3\frac{1}{2}$	$4\frac{1}{2}$
4	5	7	9
8	10	14	18
16	20	28	36
32	40	56	72
64	80	112	144
128	160	224	288

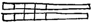
Dec 10 1876

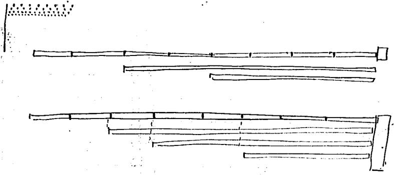
T A Edison

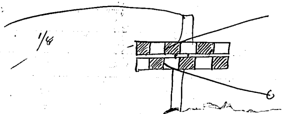
8

500.

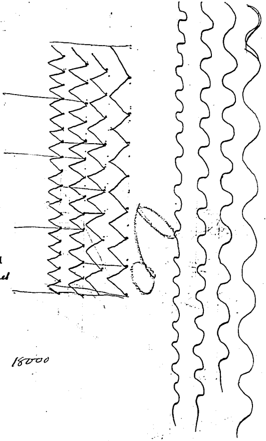
80







X-E-1684



20
15
60
40
30
7
10
25
16
25
265.

3

240
500
# 780

265.

265
52
530
1325
13,780

60
20
15
7

52
200
10400

Twenty Eight thousand

Twenty eight thousand
five hundred thousand, nine hundred

2000.
3000
1200
6200.

930
10
9300

2300,

.12

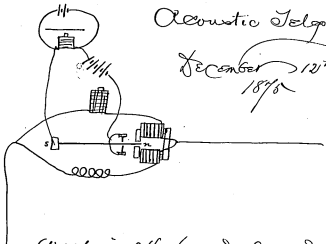
30

18000

15,000.
10000
27,300.
6000
33300.

Acoustic Telegh

December 12th
1875

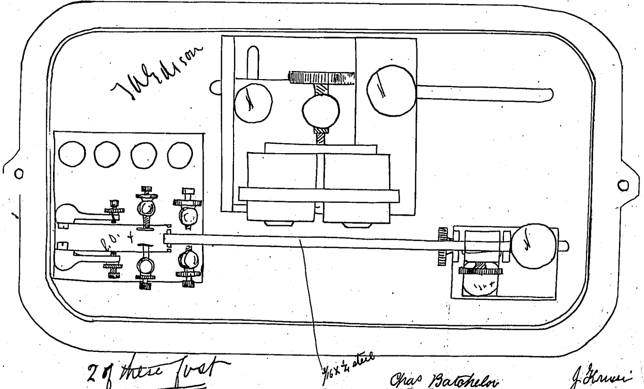


Working the reed by induction Currents =

21

Acoustic Telegraphy Nov 21st 1875

6 of these


1.0.+
1/2 +
3/16 x 1/4 steel

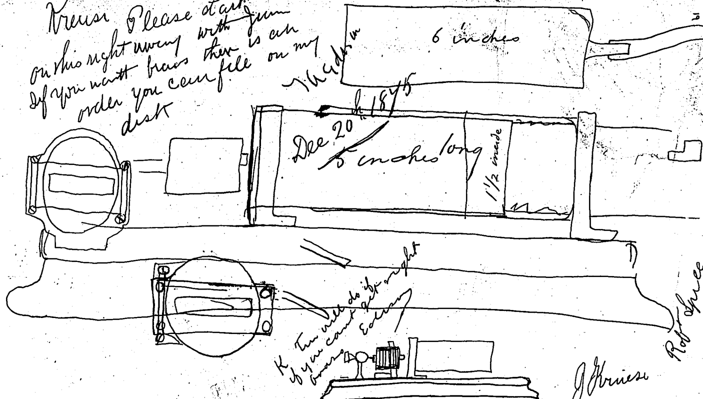
T A Edison

2 of these Post

Chas Batchelor

J Kruesi

Robt Spice


6 inches
~~5~~ inches long
1 1/2 inside

Kruesi Please start on this right away with Jim If you want brass there is an order you can file on my disk

T A Edison

Dec 20th 1875

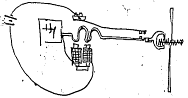
K You will do if you cant get right brass Edison

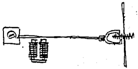
J Kruesi

Robt Spice

22

Autographic Telegraph





Nov 29 1875
Chas Batchelor